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NATURAL AND CULTURAL RESOURCES MANAGEMENT PLAN

and environmental assessment

CORONADO

NATIONAL MEMORIAL * ARIZONA

NATURAL AND CULTURAL RESOURCES

MANAGEMENT PLAN

AND ENVIRONMENTAL ASSESSMENT

for

Coronado National Memorial

Arizona

Prepared by

Coronado National Memorial
National Park Service
Department of the Interior

April 1977

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ENVIRONMENTAL SUMMARY

The Cultural and Natural Resources Management Plan for Coronado National Memorial proposes to combine research and management to retain and protect the area's historic scene and ecosystem. The natural environment will be restored and preserved as nearly as possible to its status in the historic period of the Coronado expedition in 1540. The plan provides objectives, alternative solutions for meeting objectives and proposed actions to bring resources to standard conditions.

Proposed Actions. Proposed management actions include the following: complete an inventory of historical and archeological resources; acquire appropriate historical and archeological artifacts; encourage zoning that will preserve the historic scene; establish and integrate practices of allowing naturally occurring fires, prescribed fire and suppression, and conduct ecological surveys; develop programs for appropriate management of biological communities.

Impacts. Overall impacts of proposed actions will be preservation of cultural resources, restoration of natural ecological relationships and the control of resource deterioration from human activities. Possible regulation of visitor use would inconvenience some individuals, but rehabilitative measures will contribute to long-range enhancement of visitors' experiences.

Alternatives. No action was considered for each proposed action. Status quo conditions would continue and, in many instances, resources would deteriorate. Some cultural resources could be damaged irreversibly or lost. Other alternatives range from minimum to maximum manipulation of the environment; e.g., to completely eliminate grazing from the Memorial or to limit the number of visitors arbitrarily without study. Based on legislative mandate, policies and cultural and natural values, the alternatives would provide less than optimal results on visitor experience and resource protection.

Conclusion. Because none of the proposed actions entail significant adverse environmental impacts, it is recommended that the Cultural

and Natural Resources Management Plan for Coronado National Memorial be assigned a negative declaration. Unless significant controversy develops during public review, a full environmental statement will not be prepared. The resources management plan for Coronado National Memorial will then be translated into an action program when the 30-day public review period has expired.

4-22-77
Date

Laurel W. Dale
Superintendent, Coronado National Memorial

4/22/77
Date

Jack N. Clay
General Superintendent, Southern Arizona Group

4/25/77
Date

Howard H. Chapman
Regional Director, Western Region

RESOURCES MANAGEMENT PLAN

INTRODUCTION

This plan provides a method for the National Park Service to manage the cultural and natural resources of Coronado National Memorial. It identifies resources management objectives and problems, and presents an action program to correct these problems.

Coronado National Memorial, a 2,834 acre historical area in the National Park System, is in Cochise County at the southern end of the Huachuca Mountains of Southeast Arizona. The area's 4-1/2 mile southern border coincides with the international boundary between the United States and Mexico.

The Memorial was created by Presidential Proclamation No. 2995 and based on legislative history and congressional intent. Its purpose was to permanently commemorate Francisco Vasquez de Coronado, his companions, and their explorations, to memorialize the ties which bind our country to Mexico and Spain and to strengthen international amity and cultural understanding.

The Memorial was established under the authority of the Act of August 18, 1941 (55 Stat. 630), as amended by Public Law 82-478 (July 9, 1952).

The original legislation provided for an international monument but was amended to national memorial status, primarily because Mexico did not set aside adjoining land.

Legislation establishing the Memorial permits grazing provided such activities do not interfere with public use. This same legislation prohibits the construction of fences except a) along the international border, b) along Memorial access roads and c) around areas developed by the National Park Service. It provides for cattle crossings, including necessary underpass and provides for the perpetual use of existing water stock supplies. Development is prohibited within 60 feet of the international boundary and within the S-1/2 SW 1/4 of section 10 in the western section of the Memorial.

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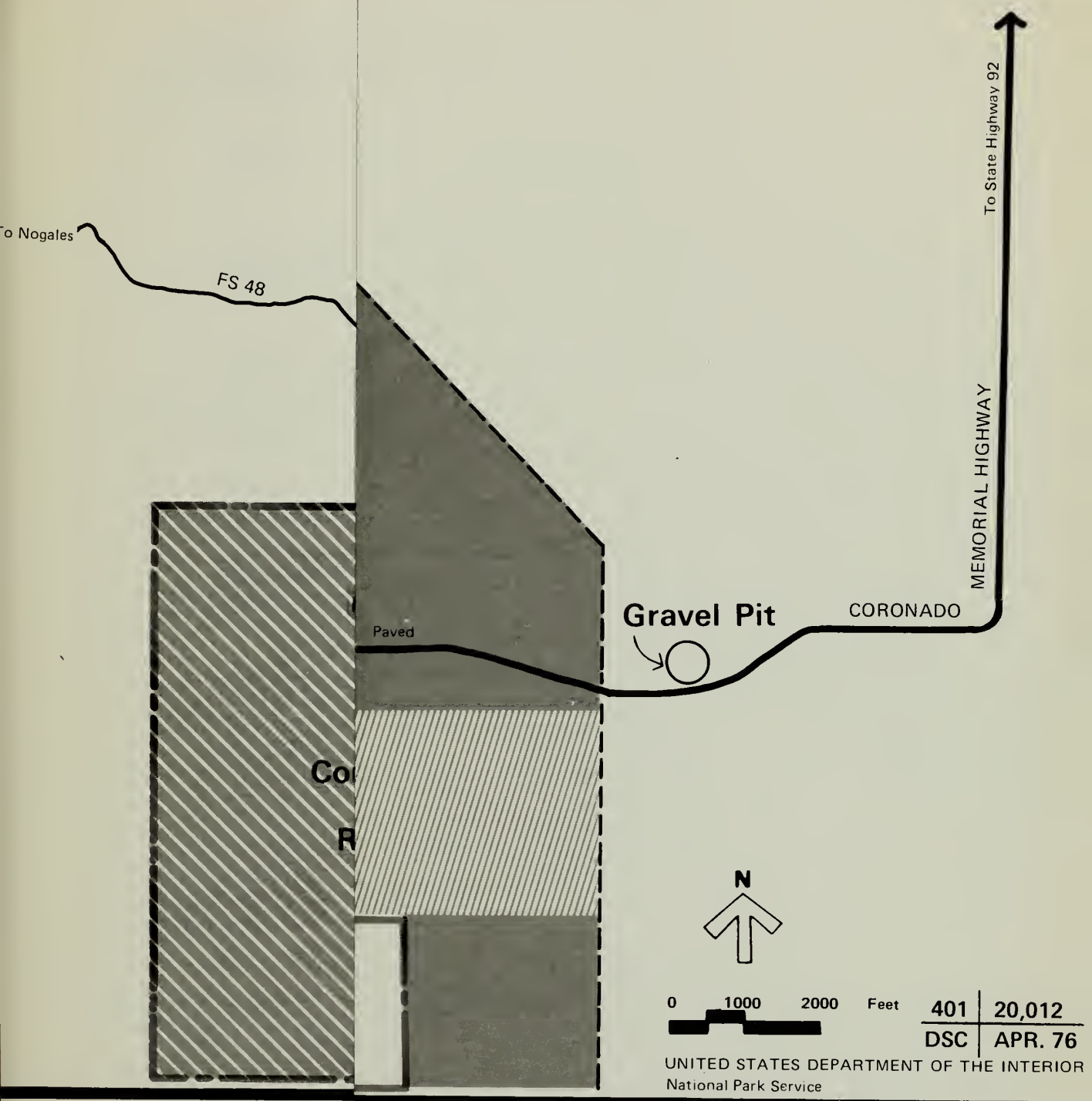
Earlier legislation provided for restricted mining within the Memorial. Minor prospecting had continued until the Act of September 28, 1976 (90 Stat. 1342) closed the Memorial to mineral entry.

Proposals within this plan were guided by and concur with the proclamation establishing the area, accepted administrative policies for an historical area in the National Park Service, and management objectives. The primary objective is to perpetuate the Memorial's cultural and natural resources and provide for visitor perception, appreciation and enjoyment of these resources.

NGE AND DEVELOPMENT



MEMORIAL BOUNDARY

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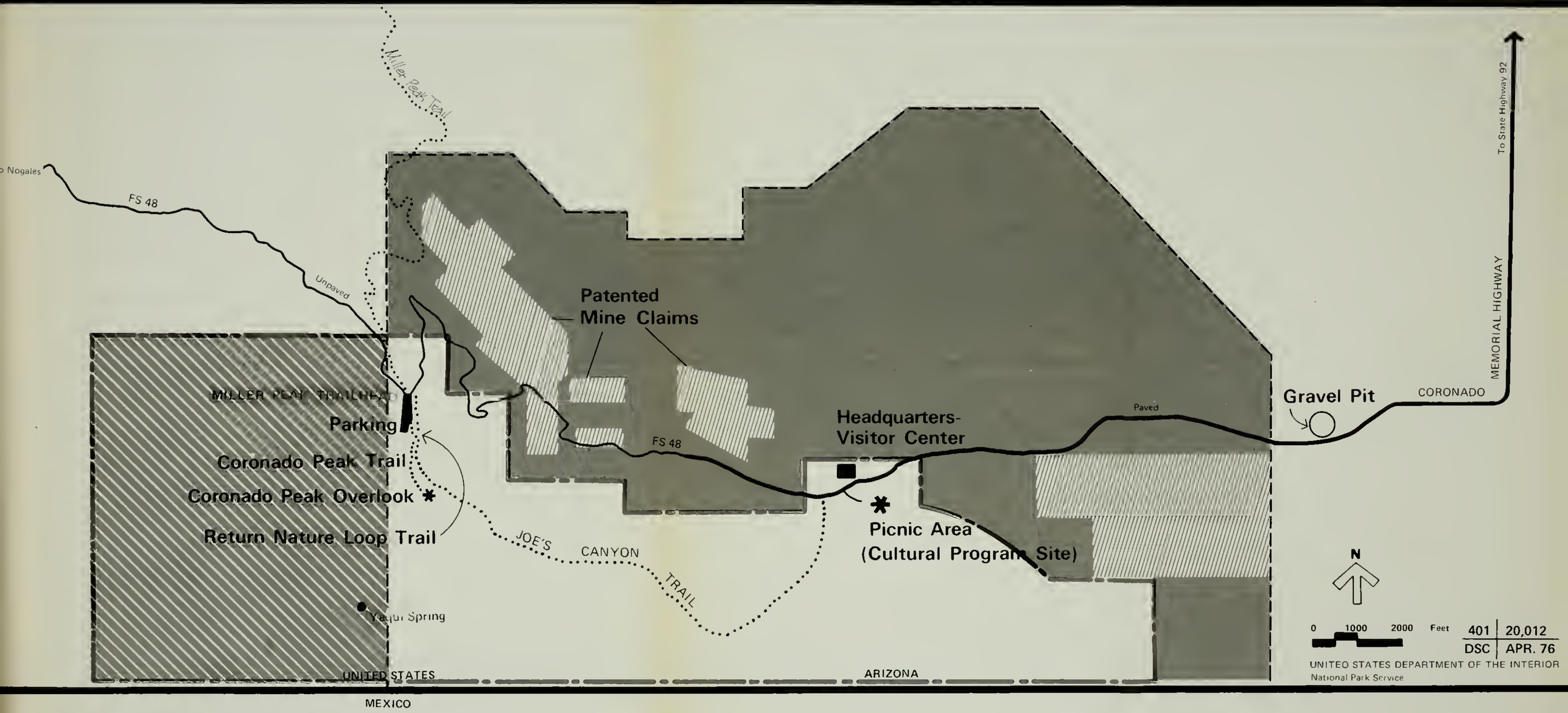
PRIVATE LAND (ACQUIRE ON WILLING SELLER BASIS)

PROPOSED BOUNDARY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JOE'S CANYON TRAIL
Yaqui Spring
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PROPOSED BOUNDARY

MANAGEMENT OBJECTIVES

Resources management objectives have been developed in accordance with Management Policies of the National Park Service. The approved resources management objectives for Coronado National Memorial are:

Develop cooperative, historical and cultural research programs that are pertinent to the purpose of the area.

Preserve the natural environment within the Park as closely as is possible to the environment of the historic period of the Coronado Expedition (1540), except where it must be modified for needed visitor and administrative facilities.

Consummate and maintain a formal fire control agreement with Coronado National Forest and, through proper channels, with neighboring landowners in Mexico.

Keep to a minimum man-made intrusions irrelevant to the purpose of the area, especially roads.

Seek minimization of adverse effects and/or retention and protection of the "historic scene" and the natural environment, which is located adjacent to, yet outside the Memorial, through cooperation with the U.S. Forest Service, private landowners and local government entities.

Initiate legislation for a land exchange agreement between the National Park Service and the U.S. Forest Service that will adjust the Memorial boundaries for easier management as an ecological unit and provide control of adverse uses.

CULTURAL RESOURCES RESEARCH AND MANAGEMENT ACTIONS

Cultural resources are fragile and unrenewable; their preservation under current laws, policies and standards for historic and cultural resources protection is a primary goal of Park management. The intent of the plan is to insure that the Memorial is managed as a public preserve within which these resources are protected and are disturbed only when no alternatives exist to meet management, interpretive or research needs.

Basic goals of cultural management are: to preserve intact the maximum amount of significant resources; and to insure that resource studies are of fully professional quality.

A primary objective of the plan is to complete a total cultural resource inventory, in compliance with Executive Order 11593, Protection and Enhancement of the Cultural Environment. Project statements specify studies necessary to complete this inventory. All resource studies will be preceded by a professionally adequate research design, to contribute significantly to the historical and archeological background of the area.

In the process of completing the cultural resource inventory, information will be obtained which will be used to plan Memorial development to minimize impacts on cultural resources. The plan: identifies those proposed developments which will have impact; suggests additional information necessary to evaluate the extent of impact; and recommends procedures to minimize impacts.

Cultural resources proposals fall in three general headings as listed below:

Spanish Borderlands Overview. An integrative guide for the visitor is planned. It will present an overall view of the Hispanic experience in the New World. The comprehensive guide will commemorate Spanish-American influence in the New World. Various sites and routes that tell the story of the Spanish Adventure currently are interpreted as separate entities, not as parts of a whole.

Historic Resources Search, Inventory and Acquisition. The Memorial's stated purpose is the commemoration of the Coronado Entrada and of

Spanish-American influence in general on the United States. To this end, a bibliographic and records search is proposed. It should result in an inventory, evaluation and listing by priority of information regarding these topics. Available sources deemed to be accurate and most amenable to visitor understanding shall be acquired for the Memorial Library under a continuing program. A bibliography will also be prepared.

Archeological Survey. In the spring of 1975, an archeological team from the Western Archeological Center accomplished a thorough survey of the Memorial and of Forest Service lands considered for exchange (see "Coronado National Memorial Survey Report by Y. G. Sewart and S. Purves). At least 75 percent of all culturally usable lands were examined and 50 percent of all slopes were surveyed. Eight perhistoric sites, three probable historic sites, and one indeterminate site were located. The preparation of a National Register nomination form including the eight prehistoric Cochise Culture sites is underway. At this time, data on the historic site is inadequate for nomination-form preparation. Various structures and above-ground, man-made features were evaluated by historical architects from the Western Regional Office, including park buildings and structures within in-holdings, but no structure was found to possess significance in architecture. The intensive survey and the preparation of National Register forms fulfills the requirements of Executive Order 11593 in terms of prehistoric archeology and in architecture but the significance of historic sites as examples of local mining and ranching are undetermined at present. If private in-holdings are acquired, surveys of these parcels will be needed.

NATURAL RESOURCES RESEARCH AND MANAGEMENT ACTIONS

Natural resources proposals are discussed below:

Protection of the Local Environment. Interpretation is enhanced by the historic scene and the surrounding natural environment. The major assaults on these values result from external developments. Locally, this includes a rural subdivision 1/2 mile east of the Park Headquarters, potential commercial development of the State of Texas Mine site as well as the existing mine, and the potential development of two other patented claims in Montezuma Canyon.

Zoning to protect Park values will be sought.

Cattle Fencing. At present, cattle graze throughout the Memorial. The animals present a safety and sanitation problem in high visitor use areas, and they damage vegetation and landscaping around the Visitor Center and picnic area. A number of fences exclude cattle from certain areas in the Memorial.

The Visitor Center and picnic areas still require fencing. The new fence will follow the Memorial boundary on the east, north, and west and parallel the north leg to the south of the picnic area.

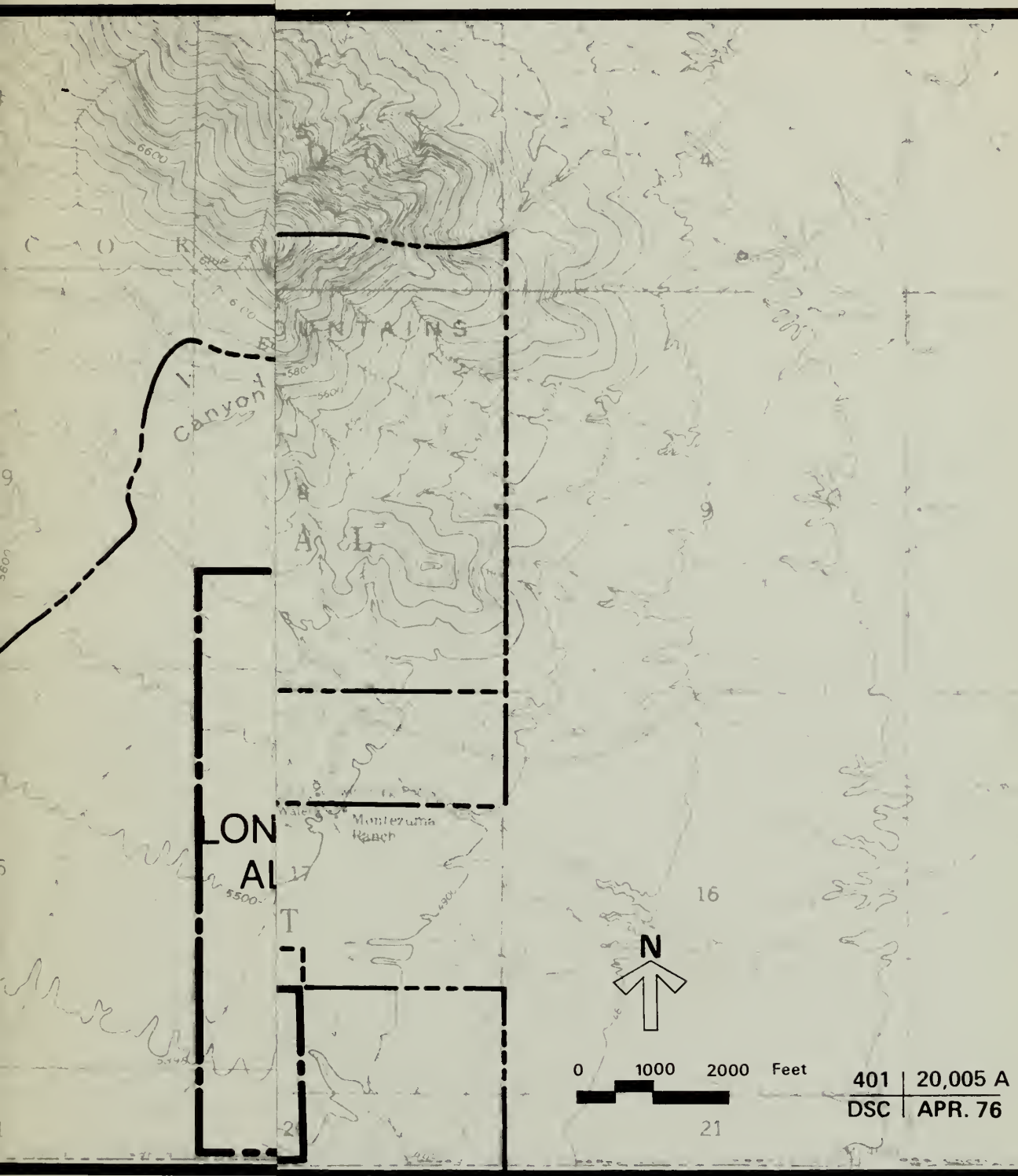
Fire Ecology Study. The Memorial has, since its establishment in 1952, suppressed all fires. Apparently past fire control efforts have led to a fuel buildup and other ecosystem alterations from a natural condition.

A fire ecology study is proposed to determine the need for and feasibility of reestablishing natural fire. The use of prescribed burns and manual treatment will be considered as means to reduce fuel levels.

To carry out a program of prescribed burns, agreements will be needed with the U.S. Forest Service, Mexico and private landowners.

Grazing Ecology Study. The Memorial's enabling legislation provides for perpetual grazing, to be restricted only when inconsistent with public use. The U.S. Forest Service currently administers use on the grazing allotments which cover the Memorial except for a few fenced

GRAZING ALLOTMENTS



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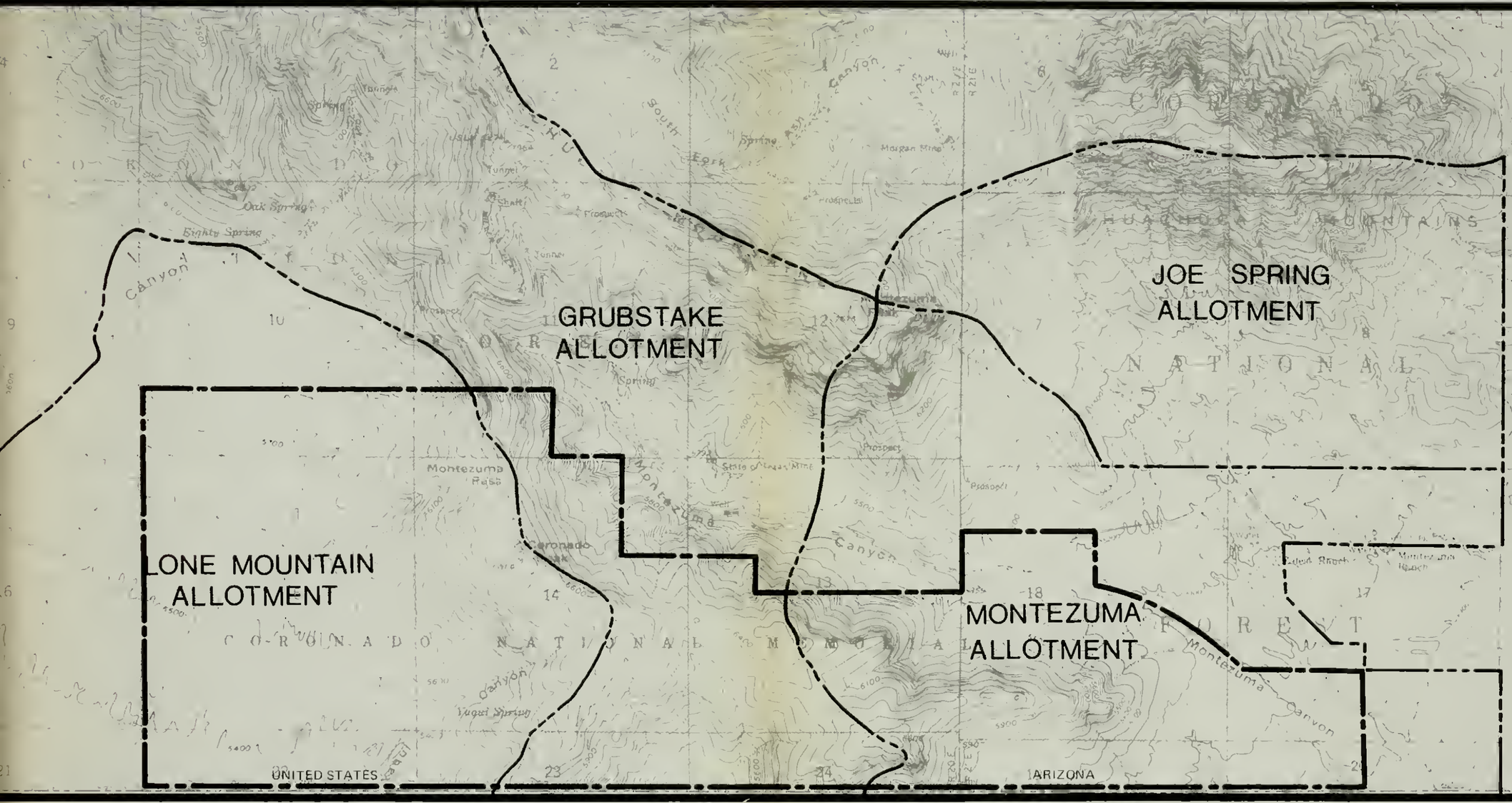

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GRAZING ALLOTMENT BOUNDARY

areas around developments. Overgrazing is evident in some areas. The Memorial has little information dealing with the impact of grazing upon the area's ecology, visitors or historic scene.

Studies will be conducted to determine the impacts of grazing on the area's natural environment, visitors, and historic scene. From this survey, research proposals will be developed as needed.

Resources Basic Inventory. Little information concerning the area's natural resources is available. General biotic inventories will be conducted. Additional studies will be undertaken to determine the extent, composition, and dynamics of the area's biotic communities. The major thrust of these studies will be to provide basic data for management and identify problem areas where future studies or work are needed. It is important to determine whether any critical habitat or threatened or endangered plants or animals occur in the Memorial.

CLASSIFIED STRUCTURES AND SCOPE OF COLLECTIONS

Coronado National Memorial is listed in the National Register of Historic Places. No sites or features within the Memorial boundaries are listed separately.

Various collections exist or items are proposed for collection as described below.

Historical. Relevant, historical artifacts, copies of documents, etc., of the early Spanish period will be acquired, if needed, as they come to light. Later items, such as replicas and examples of modern arts and crafts, will be collected as the need arises for study and research, or as called for in an approved exhibit plan.

Living History. Living-history modern replicas of costumes, arms and other cultural materials will be procured as needed for costumed interpretation, environmental living, historical pageants and other cultural programs. In these activities, original materials (museum items) will not be used.

Library. The library houses a number of books and manuscripts. Publications, tapes, transcripts and research material applicable to the area will be added to the collections. The library's contents will cover the Coronado Expedition and related events and peoples in depth. It will hold relevant documents about history of the Spanish Empire and its cultural contributions and about the history of the Spanish-Mexican movement into the United States and northwest Mexico until the present day.

Spanish-Indian ethnohistoric items, including copies of historic documents, will be collected as the need arises for study and research, or as called for in an exhibit plan. Piman items should be considered in some depth. Similarly, collections will be maintained of: archeological artifacts, plants, animals and geologic materials.

Slides and Photographs. The photo collection includes color, black and white prints and color slides. Holdings pertain mostly to Coronado history and park resources. These will be expanded later to cover Spanish and Mexican historic structures, implements, techniques, culture, etc.

All material on site should be retained at Coronado for reference and interpretive use. Collections will be available to the public under National Park Service supervision.

RELATIONSHIP OF PROPOSALS TO OTHER PROJECTS AND PLANS

The National Park Service prepared a General Management Plan for Coronado National Memorial in September 1976. Proposed projects in the document, such as boundary revision, redesigning of facilities and trail construction, will be fully assessed by archeologists and historians to assure protection of resources.

If National Park Service and U.S. Forest Service agree to exchange land and revise boundaries, changes will occur in the Memorial's future management programs. The larger size of the Memorial resulting from land exchange would increase National Park Service responsibilities.

The draft Master Plan and Environmental Assessment were prepared in September 1975 and form the basis of this resources management plan. A major proposal of the plan is to acquire some U.S. Forest Service land in exchange for the western portion of the Memorial (1,197 acres). This will delineate a more manageable unit with an identifiable boundary and watershed, increasing management efficiency; include a major access road; add diversity to the Memorial and afford greater protection to natural and cultural resources.

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ENVIRONMENTAL ASSESSMENT

of

NATURAL AND CULTURAL

RESOURCES MANAGEMENT PLAN

for

CORONADO NATIONAL MEMORIAL

DESCRIPTION OF THE ENVIRONMENT

The Memorial

Coronado National Memorial, an historical area of 2,834 acres, lies in Cochise County at the southern end of the Huachuca Mountains of southeast Arizona. The Memorial was established by Presidential Proclamation in 1952, under authority of the Act of Congress of August 18, 1941 (55 Stat. 630), as amended. Subsequent legislation in 1960 provided for a revision of boundaries and for repair and maintenance of the area's access road. The Memorial is on the National Register of Historic Places. However, no historic structures are present.

Primary access is via a paved county road which enters the area from the east. Memorial headquarters is located along this road, five miles from State Highway 92. Continuing to the west, this route provides access to Montezuma Pass, Forest Service land and Parker Canyon Lake, and Nogales. The three-mile section between the visitor center and Montezuma Pass, which is mostly unpaved, narrow, steep, and switch-backed, is presently under Park Service study. This single road through the Memorial, remains open to the public year-round and handles a fair load of "afterhours" traffic.

Since establishment, only limited development has occurred. A small visitor-center museum is located near the east entrance, and there is a small contact station at Montezuma Pass. A popular, 25-site picnic area where the Memorial's annual historical pageant is presently held, is 1/4 mile from headquarters. The 3-1/2-mile Joe's Canyon Trail leads from the picnic area to Montezuma Pass. A 1/3-mile trail leads from Montezuma Pass to the peak.

The Memorial is operated as a day-use area; however, it remains open to traffic 24 hours a day. Annual visitation in 1975 was above 75,000. Over the past five years visitor use has generally been increasing. Because of the mild climate, travel is year-round, varying about 35 percent between the high months of May and August and the low months of December and January. The annual historical pageant in spring shifts the period of heaviest travel to April. Weekends and holidays, which represent 31 percent of the year, account for approximately 65 percent of the total visitation. Weekend visitors have reached as high as 600 per day and picnickers as high as 300 per day.

The climate is generally moderate and, due to elevations, about 8°F cooler than nearby valleys. Except for frequent thunderstorms in summer and occasionally light snow in winter, humidity is low. Precipitation, which is measureably greater than in surrounding valleys, averages 20 to 25 inches. Due to limited drainage there is no permanent surface water within the area. During wet years, Yaqui Spring will trickle part of the year. Rare summer storms of exceptional intensity cause considerable damage to the road system about every ten years.

The area's flora and fauna are typical of that found in the mountains of southeast Arizona. Lions and javelina are infrequently sighted. Thirteen species of hummingbirds are found in the area. This is perhaps the highest concentration of hummingbird species in the United States. The coatimundi, a raccoon-like animal from Mexico, is often seen in the area during its cyclic highs. The U.S. Fish and Wildlife Service classifies it as a peripheral species, and thus it deserves special attention. Plant communities consist of oak chaparral and grasslands grading to pinyon-juniper at higher elevations. Tripsicum, an ancestor of Indian corn, has been found here.

Most of the Memorial is mountainous, with Coronado Peak being the highest point at 6,864 feet. Miller Peak, three miles to the north, is 9,466 feet and the loftiest point in the Hauchuca Mountains. Terrain to the east, south, and west consists of broad valleys and isolated mountains of basin and range type.

No outstanding geological features are present but small non-commercial pockets of mineralization are evident. The oldest formation is a Permian limestone laid down 275-300 million years ago. A medium-sized cave, located on U.S. Forest Service land 1/2 mile from the visitor center, is popular with area visitors.

Summer storms produce, on average, one to three lightning fires per year. Overprotected vegetation and frequent droughts produce an explosive fire hazard in the late spring.

The Region

Tucson, a metropolitan area of 400,000, lies 100 miles to the northwest of the Memorial. Approximately a dozen smaller cities and towns

are located at lesser distances. The sister cities of Douglas - Agua Prieta, located 50 miles due east, provide the major international crossing for this region. Their combined population of 43,000 will likely increase when Mexico completes new highways from Juarez and Hermosillo. Sierra Vista, Fort Huachuca and Bisbee, totaling some 32,000, are within 30 miles of the Memorial. Cananea, a large Mexican mining community located 30 air miles south, Naco, a small border crossing 25 miles east, and a few scattered ranches and "ejidos" lie south of the international boundary. The combined Arizona-Mexican population located within a radius of 100 miles approximates 500,000.

East of the Memorial lies the San Pedro Valley, by which the Coronado Entrada of 1540 is believed to have entered the present day United States. While presently a quiet pastoral scene, land development has mushroomed in the valley. In 1972, Tenneco West began building a planned community for 43,000 just 16 miles from the Memorial. Prescott Valley Development Corporation has dropped plans for a subdivision for 25,000 residents just four miles east of the Memorial.

Due to the 1971 transfer of a major portion of Fort Holabird, Maryland, to Fort Huachuca and the development of the Tenneco West community adjacent to Sierra Vista (expected to quadruple Sierra Vista's population to 100,000 within 25 years), a noticeable increase in visitation to the Memorial is anticipated. A major land use/zoning plan for Cochise County was presented to and approved by the public during 1974. This plan restricts future land development in the area.

Considerable local impetus remains for construction of the Charleston Dam near Sierra Vista. Should this become a reality, a major new recreation industry would develop with a corresponding increase in visitation to the area. The U.S. Forest Service and Fort Huachuca have developed several picnicking and camping areas, the nearest is Parker Canyon Lake 18 miles west of headquarters. A new fishing lake has been proposed for Bear Canyon, five miles west of Montezuma Pass.

Except for a small tract of private land bordering the east side, part of which the U.S. Forest Service is obtaining through a land exchange, Mexico along the southern boundary, and three patented mining claims along the north side, all land abutting the Memorial is part of the Coronado National Forest.

Grazing and recreation are predominant land uses north of the border. Past mining may occur again in the future.

Land in Mexico, immediately adjacent to the Memorial's southern boundary and extending a minimum of 20 miles to the south, east and west, is undeveloped; it is used primarily for cattle grazing. A few small, isolated farming communities dot the area, the nearest being seven miles east of the park. The Memorial's 1971 Management Appraisal indicates that Mexico's Department of Agriculture has officially designated this area the "San Pedro Ejedo" Game Refuge.

ENVIRONMENTAL IMPACT OF PROPOSED ACTIONS

Protection from development of areas surrounding the Memorial will help to maintain the Memorial's historic scene and natural character. Establishment of rural zoning near the Memorial would inhibit the development of any large resorts, subdivisions, etc., which would impringe upon the historic and natural scene. Rural zoning would preclude the sale of land for large developments.

Fencing the headquarters area will eliminate cattle damage to vegetation and landscaping in the area. This project will reduce the total amount of forage available to cattle by approximately 70 acres. This may intensify use on other areas in the Memorial, which could be prevented by reducing the total number of animal unit months. This would have a minor economic impact on the grazing permittees.

MITIGATING MEASURES INCLUDED IN PROPOSED ACTIONS

Proposed actions in the plan will lead to preservation of natural environment as it was in the historic period of 1540. Similarly, these actions will lead to protection of cultural resources. Visitors will have more valuable experiences because they will view resources that are managed optimally.

Research and monitoring of natural resources will provide continuous feedback to modify resource management efforts that are ineffective or destructive of other values and to identify new and better approaches to achieve management goals. With additional knowledge the Memorial staff will improve interpretive programs and exhibits. For example, relationships among the historic people with plants, animals and the environment will be better understood and will be portrayed more effectively.

Cultural resource management projects will be limited to nondisruptive professional surveys and studies, except where other overriding management needs may require scientific excavation to recover threatened data. This will occur only if stabilization and drainage cannot be designed to avoid destruction of cultural resources, after professional archeological examination and evaluation.

Interpretation of study results might point to a recommendation for reduction in or elimination of cattle grazing in the Memorial. Such a reduction, if proposed, would lead to fewer livestock on the range and an associated economic loss to the local community. Such a proposal would probably stir controversy and opposition from most sectors of the local public and possibly from agencies involved with grazing allotments.

Fencing, when carried out, will intrude negatively on the cultural and ecological scenery of the area. Also, fence construction might alter known or unidentified cultural sites if proper mitigating measures are not taken. Archeological surveys and clearances will precede construction of any fences.

Research will lead to recommendations for a fire management program. Subsequent management will likely protect some ecosystems from fire and prescribe periodic burning for others. Adverse effects include the generation of smoke and temporary inconvenience of visitors to the Memorial.

Project planning has been and will continue to be in compliance with Section 106 of the National Historic Preservation Act of 1966 and Executive Order 11593, Protection and enhancement of Cultural Resources. Before any work that could have an effect on cultural resources begins, consultation with the Procedures of the Advisory Council on Historic Preservation will be completed. A professional archeological examination and evaluation will be part of these proposals.

ADVERSE EFFECTS WHICH CANNOT BE AVOIDED SHOULD THE PLAN BE IMPLEMENTED

Rural zoning in those areas surrounding the Memorial may have an adverse economic impact on landowners in the area. Rural zoning would prevent the sale of their lands for large subdivisions.

The elimination of grazing in the Headquarters area may result in intensified grazing in other areas of the Memorial. By reducing the total number of animal-unit months in the Memorial, the increased use of other areas can be prevented. This could have some economic impact on the grazing permittees.

THE RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed actions were designed to enhance the area's long-term productivity, as measured by visitor safety and enjoyment and preservation of the natural and historic scene. No short-term uses which will adversely affect this long-term productivity are proposed.

Some of the proposals, such as rural zoning and elimination of grazing from the Headquarters area, will have the short-term and possibly long-term, effect of limiting consumptive use of resources within and adjacent to the Memorial.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTIONS

The proposed actions do not involve any irreversible or irretrievable commitments of resources other than required materials and labor. Any action can be reversed, if desired. For example, fences can be removed, and if rural zoning is enforced, it can be reversed.

ALTERNATIVES TO THE PROPOSED ACTIONS

1. Protection of Local Environment

   Doing nothing would result in continued adverse forms of land use on areas surrounding the Memorial. Developments detrimental to the historic scene could be placed near the Memorial without opposition from management. Under this alternative the natural quality of the area may be lost and the major interpretive resource, the scene of the field of Coronado's historic expedition, may be destroyed.

2. Cattle Fence

   a. Do nothing.

      This alternative would allow continued destruction of vegetation and landscaping in the Headquarters area. Visitor safety will also be a problem for man-cattle confrontations in heavily used visitor areas would continue.

b. Eliminate grazing from Memorial.

This would require an Act of Congress and then the entire Memorial would need to be fenced. This fencing would require a boundary survey. Increased staffing would be required to prevent trespass. This alternative would have a detrimental economic effect on those currently holding grazing leases for the Memorial. The U.S. Forest Service would lose the revenue currently gained from the grazing leases. This alternative would allow the Memorial's vegetation to return to a similarity of its appearance during the Coronado Expedition. Denuding of soils and erosion currently caused by cattle would cease. All visitor-cattle contact would cease.

c. Obtain agreement with U.S. Forest Service to reduce or control grazing to a greater degree.

Under this alternative, the U.S. Forest Service and/or Park Service would construct additional fences or reduce the number of animal-unit months in the area. A simple reduction of animal-unit months would still allow some destruction of the vegetation and landscaping in the Headquarters area. Cattle would also continue to present a potential visitor hazard in the area.

3. Natural Resource and Ecology Studies

The only alternative to the planned studies would be to do nothing. If studies are not executed, the Memorial staff will continue to manage these resources without adequate knowledge or direction. Problem areas will not be identified and remedial action will not be undertaken.

CONSULTATION AND COORDINATION

The Natural Resources Management Plan and Environmental Assessment were developed from cooperative efforts by National Park Service staff, employees from other agencies and consulting individuals.

The following individuals from National Park Service provided major contributions in the planning process: Hugo H. Huntzinger, Laurel W. Dale, Keith Anderson, Teresa Shirakawa, Michael Eames, Warren Steenbergh and Milton C. Kolipinski. Besides the contributions of staff in the National Park Service's Western Archeological Center, two individuals contributed to the preparation of the Plan's cultural aspects: Mark Grady and Bernard Fontana. They both work for Arizona State Museum.

Copies of the Plan and Environmental Assessment will be sent to the following organizations and individuals soliciting their comments. Letters of comment received will be reviewed and acted upon, as appropriate, by the Superintendent. Copies of public comments will be available at Coronado National Memorial and the National Park Service's Western Regional Office in San Francisco.

Arizona - Sonora Desert Museum
Arizona State Historic Preservation Officer
Arizona State Department of Fish and Game
Arizona State Museum
Audubon Society, Tucson Chapter
Bureau of Land Management
Bureau of Mines, Department of the Interior
Cochise County Planning and Zoning Board
Coronado National Forest, U.S. Forest Service
Museum of Northern Arizona
National Parks and Conservation Association
Sierra Club, La Seccion del Rincon Chapter
Southern Arizona Hiking Club
U.S. Fish and Wildlife Service